

IN THE CLAIMS

The Applicants hereby amend claims 31 - 32 . Claims 1 - 4, 12 - 13, 27 - 30 and 33 - 38 are Canceled. A complete listing of the claims is provided in accordance with the provisions of 37 CFR § 1.121.

Claims 1-4 (cancelled)

Claim 5 (previously presented) A system for failover comprising at least one client connectable to a plurality of interconnectable servers, each of said servers operable to process messages from said client and maintain at least transaction record respective to each said message in a transaction log stored in volatile storage, and further operable to flush said transaction log to a non-volatile storage device respective to said server after each said message is processed, wherein when more than one server is available then only one of said servers processes said messages and a remainder of said servers maintain a mirror image of said transaction log, said transaction logs being flushed on a periodic basis, and wherein when only one of said servers is available then said transaction log is flushed more frequently than said periodic basis.

Claim 6 (previously presented) The system according to claim 5 wherein said periodic basis is an interval based on one of the criteria selected from the group consisting of a fixed time interval; a predetermined number of said transaction records having been stored in said volatile storage; and a time when said volatile storage of a respective one of said servers needs to be freed for other purposes.

Claim 7 (previously presented) The system according to claim 5 wherein said servers are connectable to said clients via first network and wherein said servers are interconnectable with each other via a second network.

Claim 8 (previously presented) The system according to claim 7 wherein said second network comprises a main link and a failsafe link.

Claim 9 (previously presented) The system according to claim 7 wherein said first network is selected from the group consisting of the Internet, a local area network and a wide area network.

Claim 10 (previously presented) The system according to claim 5 wherein said client is selected from the group consisting of a personal digital assistant, a cellular telephone, a laptop computer and an email paging device.

Claim 11 (previously presented) The system according to claim 5 wherein said servers include a primary server and a backup server.

Claims 12-13 (cancelled)

Claim 14 (previously presented) The system according to claim 11 wherein said primary server and said backup server are implemented on a single computing environment that is logically partitioned into said primary server and said backup server.

Claim 15 (previously presented) The system according to claim 11 wherein said servers include a plurality of software components comprising at least one application process that operates in a hot state to process said messages and otherwise operates in a warm state.

Claim 16 (previously presented) The system according to claim 15 wherein when said primary server is available then said primary server application process operates in said hot state, and when said primary server is unavailable then said backup servers bring its application process from said warm state to said hot state and is thereafter operable to process said messages from said clients.

Claim 17 (previously presented) The system according to claim 15 wherein said software components include a failover agent executing on each of said servers and communicating with each to verify whether each other said server is available.

Claim 18 (previously presented) The system according to claim 17 wherein when said primary server failover agent fails to communicate with said backup server failover agent then said primary server begins operating in a primary-only mode during which said primary server transaction log is flushed after each message.

Claim 19 (previously presented) The system according to claim 17 wherein when said backup server failover agent fails to communicate with said primary server failover agent then said backup server begins operating in a backup-only mode during which said backup server transaction log is flushed after each message.

Claim 20 (previously presented) The system according to claim 15 wherein said software components include a replication agent executing on each of said servers and communicating with each other to maintain said mirror image when both of said servers are available.

Claim 21 (previously presented) The system according to claim 15 wherein said software components include a checkpoint agent executing on each of said servers and communicating with its respective transaction log, said checkpoint agent for flushing its respective transaction log to non-volatile storage.

Claim 22 (previously presented) The system according to claim 5 wherein said servers are operable to determine whether a received one of said messages is a duplicate and to return a result of a stored record representing a previous processing of said message in lieu of processing said message.

Claim 23 (previously presented) The system according to claim 5 wherein said message includes an identifier of said client, a message identifier, and a message body.

Claim 24 (previously presented) The system according to claim 23 wherein said message body includes a request to purchase or sell a financial instrument.

Claim 25 (previously presented) The system according to claim 5 wherein said message includes a request that is processed as at least one discrete transaction, each of said transactions generating at least one transaction log record.

Claim 26 (previously presented) The system according to claim 11 wherein when said backup server is processing requests, said backup server is operable to assume the role of said primary server when said primary server becomes available and at which point said primary server assumes the role of said backup server.

Claims 27-30 (cancelled)

Claim 31 (currently amended) A method for operating a system for failover comprising the steps of:

receiving, at a primary server, a request from a client; processing, at said primary server, said request as at least one transaction;

saving, in volatile memory of said primary server, a transaction record respective to said at least one transaction;

generating, at said primary server, a request to commit said transaction;

mirroring said transaction record in volatile memory of said backup server; and, acknowledging, in said primary server, said commit request if said mirroring is successfully confirmed;

repeating the foregoing steps for additional received messages; and

immediately flushing said primary server volatile memory to non-volatile memory if said mirroring is unsuccessfully confirmed; and, thereafter ceasing further performance of said mirroring step; and, thereafter flushing each said transaction record to non-volatile memory after said saving step.

Claim 32 (currently amended) A method for operating a system for failover comprising the steps of:

receiving, at a primary server, a request from a client;

determining whether said request is a duplicate request, and if said request is a duplicate request, then returning, to said client, a previously stored result of processing said request and if said request is not a duplicate request, then

processing, at said primary server, said request as at least one transaction;

saving, in volatile memory of said primary server, a transaction record respective to said at least one transaction;

generating, at said primary server, a request to commit said transaction;

mirroring said transaction record in volatile memory of said backup server; and,

acknowledging, in said primary server, said commit request if said mirroring is successfully confirmed.

Claims 33-38 (cancelled)